

09/748,256  
YOR.082DIV

41. (Four Times Amended) A hybrid bulk silicon and silicon-on-insulator (SOI) substrate, comprising:

an insulator layer which is formed beneath an upper portion of single crystal silicon and has at least one lateral end portion adjacent a lower portion of said single crystal silicon; and

a plurality of isolation oxides formed in said upper portion of said single crystal silicon so as to form at least one island of said single crystal silicon on an upper surface of said insulator layer,

wherein said upper portion of said single crystal silicon and said lower portion of said single crystal silicon have a same crystal orientation, and

wherein said upper portion of said single crystal silicon comprises crystallized epitaxial silicon which is grown from said lower portion of said single crystal silicon.

45. (Four Times Amended) A semiconductor device comprising:

a bulk semiconductor region comprising semiconductor substrate; and  
a semiconductor-on-insulator region comprising:

an insulator layer which is formed beneath an upper portion of said semiconductor substrate and has at least one lateral end portion adjacent to a lower portion of said semiconductor substrate; and

at least one isolation oxide formed in said upper portion of said semiconductor substrate so as to form at least one island of said semiconductor substrate on an upper surface of said insulator layer,

wherein said upper portion of said semiconductor substrate and said lower portion of said semiconductor substrate have a same crystal orientation, and

wherein said upper portion of said semiconductor substrate comprises crystallized epitaxial silicon which is grown from said lower portion of said semiconductor substrate.

46. (Thrice Amended) A semiconductor device comprising:

a single crystal silicon substrate having a lower portion and an upper portion;

3

09/748,256  
YOR.082DIV

an insulator layer which is formed beneath said upper portion of said single crystal silicon substrate and has at least one lateral end portion adjacent to said lower portion of said single crystal silicon substrate; and

at least one isolation oxide formed in said upper portion of said single crystal silicon substrate so as to form at least one island of said single crystal silicon substrate on an upper surface of said insulator layer,

wherein said upper portion of said single crystal silicon substrate and said lower portion of said single crystal silicon substrate have a same crystal orientation, and

wherein said upper portion of said single crystal silicon comprises crystallized epitaxial silicon which is grown from said lower portion of said single crystal silicon.